

Data User Guide

GPM Ground Validation Campaign Reports IFloodS

Introduction

The GPM Ground Validation Campaign Reports IFloodS dataset consists of various reports filed by the scientists during the IFloodS campaign which took place from May 1 to June 15, 2013. Reports included in this dataset are for the Hydro Forecasts, Weather Forecasts, Instruments, Mission Scientists, and Plan of the Day. Many reports have additional information included as attachments.

Citation

Petersen, W. and IFloodS Science Team. 2015. GPM Ground Validation Campaign Reports IFloodS [indicate subset used]. Data set available online [ftp://gpm.nsstc.nasa.gov/gpm_validation/ifloods/reports/] from the NASA EOSDIS Global Hydrology Resource Center Distributed Active Archive Center Huntsville, Alabama, U.S.A.

Keywords:

NASA, GHRC, IFloodS, GPM GV; precipitation measurements, droplet size, droplet shape, cloud/droplet physics, temperature, humidity, drop size distribution; 2DVD, APU, D3R, MRR (Micro Rain Radar), NPOL, nu-wrf, rain-gauges-ifc, rain-gauges-nasa, XPOL, XPOL-2, XPOL-3, XPOL-4, XPOL-5;

Campaign

The Iowa Flood Studies (IFloodS) campaign was a ground measurement campaign that took place in eastern Iowa from May 1 to June 15, 2013. The goals of the campaign were to collect detailed measurements of precipitation at the Earth's surface using ground instruments and advanced weather radars and, simultaneously, collect data from satellites passing overhead. The ground instruments characterized precipitation -- the size and shape of raindrops, the physics of ice and liquid particles

throughout the cloud and below as it falls, temperature, air moisture, and distribution of different size droplets -- to improve rainfall estimates from the satellites, and in particular the algorithms that interpret raw data for the Global Precipitation Measurement (GPM) mission's Core Observatory satellite, which launched in 2014. More information about IFloodS is available at http://gpm.nsstc.nasa.gov/ifloods/.

Investigators

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File Naming Convention

The report files in this dataset are illustrated by a representative collection of examples listed below:

hydro_forecasts_yyyy-mm-dd.tar
weather_forecast_yyyy-mm-dd.tar
inst_sc_[instrument]-yyyy-mm-ddThh-mm_yyyy-mm-ddThh-mm.pdf
 Also: inst_sc_[instrument]-yyyy-mm-ddThh-mm_yyyy-mm-ddThh-mm.tar
mission_scientist_report_yyyy-mm-dd.pdf
 Also: mission_scientist_report_yyyy-mm-dd.tar
plan_of_the_day_yyyy-mm-dd.pdf

where:

yyyy-mm-dd = year, month, day
hh-mm = hour, minute
inst = instrument
pdf = Acrobat Portable Document Format (Adobe Systems Incorporated)
tar = Tape ARchive
instrument = 2DVD, APU, D3R, MRR (Micro Rain Radar), NPOL, nu-wrf, raingauges-ifc, rain-gauges-nasa, XPOL, XPOL-2, XPOL-3, XPOL-4, XPOL-5

Data Format Description

The GPM Ground Validation Campaign Reports IFloodS dataset consists of reports in Acrobat Portable Document Format (.pdf) format and Tape ARchive (.tar) files. Reports with associated attachments have been bundled along with the attachments into a .tar file. The attachments are in various formats such as PowerPoint (.pptx), Joint Photographic Experts Group (.jpg), Portable Network Graphics (.png), Microsoft Word (.docx).

Contact Information

To order these data or for further information, please contact:

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